AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-18. (Cancelled)

19. (currently amended) An information retrieval system for retrieving information a user seeks from a plurality of documents, comprising:

document storage means for storing the plurality of documents;

feature amount extraction means for extracting a feature amount of each of the plurality of documents;

clustering means for classifying the plurality of documents into a plurality of clusters based on the extracted feature amounts so that each cluster includes one document or a plurality of documents having feature amounts similar to each other as an element;

wherein said clustering means is configured to programmatically enforce a rule wherein the number of the plurality of clusters is determined such that the number of clusters having two or more elements of the plurality of clusters is maximized;

document retrieval means for retrieving a document satisfying a retrieval condition input by the user among the plurality of documents; and

interface means for presenting the retrieved document together with the rest of documents included in a cluster to which the retrieved document belongs, as retrieval results.

wherein the number of the plurality of clusters is determined such that the number of clusters having two or more elements of the plurality of clusters is at the largest.

20. (currently amended) An information retrieval system for retrieving information a user seeks from a plurality of documents, comprising:

document storage means for storing the plurality of documents;

feature amount extraction means for extracting a feature amount of each of the plurality of documents;

clustering means for classifying the plurality of documents into a plurality of clusters based on the extracted feature amounts so that each cluster includes one document or a plurality of documents having feature amounts similar to each other as an element;

cluster term label preparation means for <u>automatically</u> selecting one or more terms, which is or are arranged in order of high term score, as a label of the cluster, for each of the plurality of clusters, the term score being obtained by calculating the number of documents in which a term appears in the cluster, for each of the terms included in documents belonging to the cluster;

document retrieval means for retrieving a document satisfying a retrieval condition input by the user among the plurality of documents; and

interface means for presenting the retrieved document together with the label of the cluster, to which the retrieved document belongs, and the rest of documents belonging to the cluster, as retrieval results. 21. (currently amended) An information retrieval system for retrieving information a user seeks from a plurality of documents, comprising:

document storage means for storing the plurality of documents;

feature amount extraction means for extracting a feature amount of each of the plurality of documents;

clustering means for classifying the plurality of documents into a plurality of clusters based on the extracted feature amounts so that each cluster includes one document or a plurality of documents having feature amounts similar to each other as an element;

cluster sentence label preparation means for <u>automatically</u> selecting one sentence as a label of the cluster based on a term score for each of the plurality of clusters, the sentence being included in documents belonging to the cluster, the term score being obtained by calculating the number of documents in which a term appears in the cluster, for each of the terms included in documents belonging to the cluster:

document retrieval means for retrieving a document satisfying a retrieval condition input by the user among the plurality of documents; and

interface means for presenting the retrieved document together with the label of the cluster, to which the retrieved document belongs, and the rest of documents belonging to the cluster, as retrieval results.

22. (previously presented) The information retrieval system of Claim 21, wherein, the cluster sentence label preparation means work out a sum of term scores of all terms included in the sentence, and select a sentence in which the sum of the term scores is largest as a label of the cluster, for each of the sentences included in

documents belonging to the cluster.

23. (currently amended) An information retrieval system for retrieving information a user seeks from a plurality of documents, comprising:

document storage means for storing the plurality of documents;

feature amount extraction means for extracting a feature amount of each of the plurality of documents;

clustering means for classifying the plurality of documents into a plurality of clusters based on the extracted feature amounts so that each cluster includes one document or a plurality of documents having feature amounts similar to each other as an element;

cluster label preparation means for <u>automatically generating</u> preparing a cluster label representing the contents of the cluster <u>based on terms contained in feature</u> <u>vectors</u>, for each of the plurality of clusters;

document label preparation means for preparing a document label representing the contents of the document, for each of the clustered documents;

document retrieval means for retrieving a document satisfying a retrieval condition input by the user among the plurality of documents; and

interface means for presenting the retrieved document together with the cluster label of the cluster to which the retrieved document belongs, the rest of documents belonging to the cluster, and the document labels which are associated with each of the retrieved document and the rest of documents, as retrieval results.

24. (previously presented) The information retrieval system of Claim 23,

wherein, the document label preparation means selects one sentence characterizing the document from all sentences in the document as the document label.

- 25. (previously presented) The information retrieval system of Claim 24, wherein, the document label preparation means selects one sentence as the document label based on appearance frequency information of terms included in the document.
- 26. (currently amended) An information retrieval system for retrieving information a user seeks from a plurality of answer documents, comprising:

document storage means for storing the plurality of answer documents and a plurality of question documents, at least one or more question documents being associated with each of the answer documents;

feature amount extraction means for extracting a feature amount of each of the plurality of answer documents;

clustering means for classifying the plurality of answer documents into a plurality of clusters based on the extracted feature amounts so that each cluster includes one document or a plurality of documents having feature amounts similar to each other as an element;

wherein said clustering means is configured to programmatically enforce a rule wherein the number of the plurality of clusters is determined such that the number of clusters having two or more elements of the plurality of clusters is maximized;

question document retrieval means for retrieving a question document conforming with a user question input by the user among the plurality of question documents; and

interface means for presenting the retrieved question document and the answer document associated with the question document together with the rest of answer documents included in the cluster to which the answer document belongs, as retrieval results.

27. (previously presented) The information retrieval system of Claim 26, wherein, the interface means receives selection of an answer document by the user among the answer documents of the presented retrieval results, and

the information retrieval system further comprises document upgrading means for newly storing the document of the user question in the document storage means in association with the selected answer document.